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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,189	04/25/2001	Govind Malalur	108339-00000	3654

32294 7590 08/11/2004

SQUIRE, SANDERS & DEMPSEY L.L.P.
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TYSONS CORNER, VA 22182

EXAMINER

NGUYEN, BRIAN D

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/841,189	Applicant(s) MALALUR ET AL.	
	Examiner Brian D Nguyen	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the application filed 4/25/01.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/7/01 & 5/28/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "7" in figure 5 has been used to designate both PMMU and GPIC4.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "81", "82", and "83" on page 7.
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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5. Claims 1-9, 14-22, and 27-32 are rejected under 35 U.S.C. 102(a) as being anticipated by LEVEL ONE (Level One™ IXP1200 Network Processor).

Regarding claim 1, Level One discloses a network switch comprising a first and a second data port interfaces, a CPU interface, a common memory, a memory management unit (see figure 1 on page 5), and at least two set of communication channels for communicating data and messaging information wherein one set of communication channels provides communication from the first and second interfaces to the memory management unit and another set provides communication from the memory management unit to the first and second interfaces (see figure where bi-directional communication between elements of the switch is shown, the communication includes data and messaging information).

Regarding claims 2 and 3, Level One discloses three communication channels including a first channel for communicating data, a second channel for controlling the transmission of data on the first channel, and a third channel for controlling other activity in the switch (see pages 45-50 where different channels are shown).

Regarding claim 4, Level One discloses a gigabit data port interface (see figure 1).

Regarding claim 5, Level One discloses ASIC chip (see first paragraph on page 1).

Regarding claims 6 and 7, Level One discloses the switch is configured to perform layer two/three switching at wirespeed (see processor description on page 5).

Regarding claims 8 and 9, Level One discloses a remote CPU (see CPU in figure 1).

Regarding claims 14-22, claim 14-22 are means plus function claims that have substantially the same limitations as the respective apparatus claims 1-9. Therefore, they are subject to the same rejection.

Regarding claims 27-32, claims 27-32 are method claims that have substantially the same limitations as the respective method claims 1-9. Therefore, they are subject to the same rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 10-11, 13, 23-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over LEVEL ONE (Level One™ IXP1200 Network Processor) in view of Hegde (6,570,875).

Regarding claims 10-11 and 13, Level One discloses different tables (see pages 1 and 2.4 on page 11). Level One does not specifically disclose VLAN table. However, a switch that supports VLAN with VLAN table is well known in the art. Hegde discloses VLAN table (see figure 3 and col. 6, lines 1-3). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the VLAN table as taught by Hegde in the system of Level One so that data packets can be routed between VLANs.

Regarding claims 23-24 and 26, claims 23-24 and 26 are means plus function claims that have substantially the same limitations as the respective apparatus claims 10-11 and 13. Therefore, they are subject to the same rejection.

8. Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over LEVEL ONE (Level One™ IXP1200 Network Processor) in view of Bray et al (6,483,849).

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Regarding claim 12, Level One does not specifically disclose an auto-negotiating unit. However, this feature is well known in the art. Bray discloses an auto-negotiating unit (see figure 2). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the auto-negotiating unit as taught by Bray in the system of Level One so that different devices with different speed can communicate with the switch.

Regarding claim 25, claim 25 is a means plus function claim that has substantially the same limitations as the respective apparatus claim 12. Therefore, it is subject to the same rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hoffman et al (6,094,435), Smeulders et al (6,741,559), and Headrick et al (5,724,358).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (703) 305-5133. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



8/5/04

BRIAN NGUYEN
PRIMARY EXAMINER